

# Non-Guideline Applications: Introductory Remarks

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# Presentations

- 2002 NATA—Ted Palma (OAQPS)
- AERMOD Experiences in Birmingham PM2.5 Study—Leigh Bacon (ADEM)
- Use of Photochemical Models for NEPA: New Oil & Gas Wells—Ralph Morris (ENVIRON)

# Toxics Risk Assessments

- Appendix W states . . .
  - “We separately issue guidance for use of modeling for facility-specific and community-scale air toxics risk assessments through the Air Toxics Risk Assessment Reference Library.”
    - [http://www.epa.gov/ttn/fera/risk\\_atra\\_main.html](http://www.epa.gov/ttn/fera/risk_atra_main.html)
  - “We recognize that the tools and approaches recommended therein will eventually reflect the improved formulations of the AERMOD modeling system and we expect to appropriately incorporate them as expeditiously as practicable.”

# Ozone/PM2.5/Regional Haze Modeling Guidance

- “Guidance on the use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze”
  - Original draft—Jan 2001
  - Draft final—Sept 2006
  - Final version—April 2007
- <http://www.epa.gov/scram001/guidance/guide/final-03-pm-rh-guidance.pdf>

# Local Area Analysis

- Focused on evaluating influence of primary PM<sub>2.5</sub> at monitors
  - Provides method to examine local primary PM source contributions at FRM monitors
- Replaces “hotspot” analysis from draft PM<sub>2.5</sub> (2001) guidance
  - 2001 guidance specified dispersion modeling in unmonitored areas w/ high primary PM<sub>2.5</sub> emissions
- Local area analysis can use dispersion models or fine grid Eulerian model

# Local Area Analysis

- Model local sources to examine contributions to nonattainment and impacts of potential controls
  - High resolution grid model
    - 1 km (or finer?) resolution
    - Follow “standard” guidance procedures
  - Dispersion modeling
    - Need to combine the results of the photochemical and dispersion models
    - The modeling guidance outlines a framework to do this

# PM2.5 Local Area Analysis Modeling Workshop

- EPA sponsored October 2007 workshop in Rosemont, IL to discuss modeling experiences and issues/recommendations
- Several state presentations
  - Cleveland, Cincinnati, & Steubenville (Ohio EPA)
  - St Louis Area (IL EPA)
  - **Birmingham, AL area (ADEM)**
  - Atlanta, GA (GA EPD)
  - Allegheny Co, PA (Allegheny Co Health Dept)
  - Detroit, MI (MDEQ)